Amendment to the Claims

1 – 16. (Canceled)

17 (Original). A radio transceiver, comprising:

radio front end for receiving, amplifying and down converting and filtering a radio frequency (RF) signal to produce a low frequency received signal;

analog to digital converter operatively coupled to receive the low frequency received signal, the ADC producing a digital low frequency signal;

baseband processor coupled to receive and process the digital low frequency signal;

radar detection circuit coupled to receive the digital low frequency signal, wherein the radar detection circuit further includes:

multiplication circuitry for receiving and squaring a low frequency digital signal;

moving average filter coupled to selectively receive an output signal produced by the multiplication circuitry, the moving average filter producing a moving average filtered signal;

first conversion block for converting a magnitude of the moving average filtered signal into decibel values; and

a threshold comparison state machine coupled to receive an output of the first conversion block in decibel values, the threshold machine for measuring rise time, fall time, and magnitude levels of received signals and detects a received radar pulse pattern and produces a corresponding control signal indicating whether a radar signal has been detected to the baseband processor; and

wherein the processor is coupled to receives rise time, fall time, and magnitude levels of received signals from the threshold comparison state machine, and wherein the processor determines whether the radar signal has been received and, if so, inhibits transmissions on overlapping frequency bands.

18 (Original). The radio transceiver of claim 17 wherein the radar detection circuit further includes a second conversion block coupled to selectively receive the output signal produced by the multiplication circuitry, the second conversion block converting the magnitude of the moving average filtered signal into decibel values.

19 (Original). The radio transceiver of claim 18 wherein the radar detection circuit further includes a summing node for subtracting a receiver gain setting from the magnitude in decibel values of the output of the multiplication circuitry.

20 (Original). The radio transceiver of claim 19 wherein the moving average filter and the first conversion block are coupled serially in a first branch and the second conversion block and the summing node are coupled in a second branch and wherein logic selects between the first and second branch based upon whether a wireless local area network (WLAN) signal is being received.

21 (Original). The radio transceiver of claim 20 wherein the first branch is selected if the wireless LAN signal is being received and the second branch is selected if the wireless LAN signal is not being received.

22 - 39. (Canceled)

40 (New). A method for detecting a radar signal, comprising:

in a radio front end circuit, receiving, amplifying and down-converting and filtering a radio frequency (RF) signal and producing an ingoing downconverted low frequency signal;

producing a low frequency digital ingoing signal based on the ingoing downconverted signal;

processing, in a baseband processor, the low frequency digital ingoing signal;

receiving and squaring the low frequency digital ingoing signal and producing squared components of the low frequency digital ingoing signal;

averaging the squared components of the low frequency digital ingoing signal in a moving average filter that is coupled to receive the squared components and producing a moving average filtered signal;

producing a logarithmic signal based on the moving average filtered signal; and

receiving the logarithmic signal and:

measuring rise time, fall time, and magnitude levels of the logarithmic signal;

determining that a radar pulse pattern was received; and

inhibiting transmissions on overlapping frequency bands.

41 (New). The method of claim 40 further including:

removing the moving average filter from a processing path and producing the logarithmic signal based on the squared components produced by multiplication circuitry.

42 (New). The method of claim 41 further including adjusting the logarithmic signal based on a gain setting.

43 (New). The method of claim 41 further including removing the moving average filter from the processing path when a wireless local area network signal is not being received and including the moving average filter in the processing path when the wireless local area network signal is being received.

44 (New). The method of claim 40 further including, in the radio front end, producing low pass filtered signals having I and Q components as the ingoing downconverted low frequency signal wherein the I and Q components are squared in the squaring step.